Timeline: Events in the Tomales-Bodega Bays Roe Herring Fishery

1972-73
The Tomales Bay roe herring fishery was under way on January 6, 1973. The California State Legislature assumed control of the fishery over concerns of an unrestricted fishery, when the Governor signed the emergency legislation on January 17, 1973. Emergency legislation established a temporary (61 day) catch quota of 750 tons for Tomales Bay and San Francisco. Catch was made with round haul gear.

1973-74
With the last season's emergency regulations expired, the California State Legislature passed legislation establishing a 450 ton quota for the 1973-74 and 1974-75 season. The Department was asked to conduct an 2-year study and assess the spawning biomass in Tomales Bay and San Francisco. At the end of the 2-year study, regulatory authority of the fishery would revert to the Fish and Game Commission who would set quotas based on the field studies. The concern for the safety of other bay users led to limiting the number of herring permits. A lottery was conducted for the five herring permits issued for Tomales Bay.

1974-75
Three lampara boats, one purse seiner, and one drift gill netter were drawn by lottery for the Tomales Bay roe fishery. The 450 ton quota was exceeded by 68 tons.

1975-76
Legislative control expired after the 1974-75 season and regulatory authority over the herring roe fishery reverted to the Fish and Game Commission. Five special permits were issued for Tomales Bay for herring bait and fresh fish markets. There were a total of fourteen herring permits issued for Tomales Bay (There was nothing in the record explaining the additional four permits for Tomales). The Bodega Bay fishery began without a catch quota, or limited by permit.

1976-77
The Fish and Game Commission obtained control of the fishery in all state ocean waters. The Tomales Bay quota was increased to 825 tons, and a separate quota limit of 350 tons was set for Bodega Bay. Seventeen herring permits were issued for Tomales Bay (5 round haul, 7 gill net; and 5 special-gear permits (beach seine) available on a first come, first serve basis. Twenty-four gill net permits were issued for the Bodega Bay fishery. Due to concerns regarding potential conflicts with other bay user groups, weekend fishing in Tomales Bay and Bodega Bay was prohibited from noon Friday to sunset on Sunday. Anchored or "set" gill nets were allowed. Gill net mesh size was regulated with a 2 inch minimum to 2 ½ inch maximum gill net mesh size range. The maximum amount of gill net a permittee could use was limited to 300 fathoms of gill net. Round haul gear was prohibited in all District 10 waters except Tomales Bay (San Francisco Bay is in District 11, 12, and 13).

1977-78
Tomales Bay roe herring fishery gear was restricted to gill net use only due to public sentiment. The maximum amount of gill net used was restricted to a total of 195 fathoms of net.

1978-79
Tomales and Bodega Bays were combined into one permit area. The permit area was split into two platoons that fished alternate weeks. A spawning ground survey for Tomales Bay not conducted this season. A maximum amount of 130 fathoms (2 shackles; one shackle of net is 65 fathoms) of gill net was allowed for Tomales Bay.

1979-80
Tomales-Bodega Bay area roe herring permits capped at sixty-nine permits. No new permits would be issued until the total permits fell below sixty-nine permits. The depth of a gill net was restricted to no more than 120 meshes deep. No more than 260 fathoms (4 shackles) of net were allowed in Bodega Bay waters.

1980-81
Tomales-Bodega Bay area herring permits fell below sixty-nine permits, when one permit was not renewed. The Fish and Game Commission then issued two new roe herring permits.

1981-82
Tomales-Bodega Bay area herring permittees were allowed to exchange their permits for available San Francisco Bay permits to help alleviate crowding on Tomales Bay.

1982-83
Tomales-Bodega Bay area herring permittees were allowed to transfer their permits to San Francisco Bay to help alleviate crowding on Tomales Bay. The number of Tomales Bay herring permits was reduced to forty-one permits, and no new permits would be issued, until there were less than 35 permits in Tomales Bay.

1985-86
Spawning ground surveys were conducted. However, due to the inability to locate spawning, which was indicated by bird and fishing activity, the spawning ground survey results were poor for this season. As a result, a cohort analysis was used to estimate the spawning biomass.

1986-87
The total gill net restriction in Bodega Bay was changed from 260 fathoms (4 shackles) of gill net to 130 fathoms (2 shackles) of gill net to make the amount of gear consistent in all permit areas. One shackle of gill net is 65 fathoms of net.

1989-90 to 1991-92

The provision for the use of drift gill nets was removed; therefore, only set gill nets were allowable. There is no explanation in the record as to why drift gill nets were removed from accepted gear. The Tomales Bay herring fishery was closed after a record low 167 tons of spawning escapement in the 1988-89 season, which followed several seasons of low spawning and herring abundance. The Tomales Bay herring fishery remained closed (1989-90, 1990-91, and 1991-92 seasons) because spawning escapement did not exceed minimum escapement levels to support a fishery. Fishing was allowed to continue in the outer Bodega Bay. The outer bay fishery was modified by an increased closure zone around the mouth of Tomales Bay, and fishing was permitted only in Bodega Bay waters north of a line drawn due west, 240° magnetic, from the mouth of Estero de San Antonio. The closure zone around the mouth of Tomales Bay was designed to allow unimpeded access to Tomales Bay for spawning herring. Department biologists speculated that herring were displaced from Tomales Bay by unfavorable environmental conditions in the bay. Biologists hypothesized that herring would return, if environmental conditions (i.e. normal rainfall to reduce bay salinity) in Tomales Bay were more conducive for spawning.

1992-93

The 1992-93 season coincided with a remarkable return of spawning herring to Tomales Bay, and the end of a six year drought. The Tomales Bay fishery was re-opened for the 1992-93 season, when spawning ground survey results during the closure indicated improvement in spawning, and signaled that the spawning herring population was potentially recovering. The mechanism responsible for the increase in spawning escapement is unknown. Good recruitment is one possibility along with possible movement of herring from other spawning areas to Tomales Bay. The outer Bodega Bay fishery was partially closed and the fishery was restricted to Bodega Bay and Tomales Bay waters south of line drawn due west, 240° magnetic, from the mouth of Estero de San Antonio. The Tomales Bay fishery was re-opened with conservative measures that included a quota based upon ten percent of the previous season biomass, an increase in the commercial gill net minimum mesh size to 2 -1/8 inches, and a reduction of the maximum allowable amount of gill net used to one shackle (65 fathoms). An initial quota of 120 tons was established, with a maximum quota of 200 tons, if the spawning surpassed the 2000 ton escapement goal.

1993-94 to 1996-97

Corresponding to the re-opening of the Tomales Bay fishery was the partial closure of the outer Bodega Bay fishery. In the 1993-94 season the Tomales Bay fishery boundary was confined within Tomales Bay, to District 10 waters south of a line drawn 252° magnetic, from the western tip of Tom's Point to the opposite shore. The outer Bodega Bay fishery was closed due to concern that this fishery intercepted potential Tomales Bay spawning fish. Additionally, the Department felt that an accurate estimate of the biomass of herring that held in the outer bay could not be

obtained, and that quotas for the outer bay fishery could not be based on a spawning biomass, as stated in management documents.

1997-98 to Present

The 1997-98 El Niño event had a detrimental effect on herring spawning populations throughout the state causing a loss of older age classes and a reduction in growth rates. Tomales Bay herring fishermen expressed concerns that the 2-1/8 inch gill net mesh size was no longer efficient in capturing herring after the 1997-98 El Niño event and requested that the Department consider changing the minimum mesh size to 2 inches. The industry stated that the increased number of “belly caught” herring indicated that the 2 1/8 inch mesh size was too large; a proper mesh size should capture herring at the gills and not at the belly. The industry also pointed to poor catch rates caused by an improper mesh size, which reduced both the quality and quantity of the roe herring landed. These two factors made the Tomales Bay fishery prohibitively unprofitable. The Department recommended to the Commission that a fleet wide gill net mesh study be done to assess the effects of a minimum 2 inch mesh size on the current population structure.